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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,121	01/22/2007	Jerome B. Zeldis	9516-314-999	5580

84802 7590 12/09/2009

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EXAMINER	
PIHONAK, SARAH	
ART UNIT	PAPER NUMBER
1627	
MAIL DATE	DELIVERY MODE
12/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,121	ZELDIS, JEROME B.	
	Examiner	Art Unit	
	SARAH PIHONAK	1627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *8/10/2009 and 8/17/2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *49 and 57-64* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *49 and 57-64* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/10/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This application, filed on 1/22/2007, is a national stage entry of PCT/US04/13252, filed on 4/28/2004.

Priority

This application is a continuation-in-part of Application No. 10/699154, filed on 10/30/2003.

Response to Remarks

1. Applicant's arguments, regarding the rejection of claims 58 and 59 under 35 USC § 112, second paragraph, filed 8/17/2009, have been fully considered and are persuasive. Claim 58 has been amended to remove the terms "a xanthine derivative", and claim 59 has been amended to remove the term "solvates". The rejection of claims 58 and 59 under 35 USC § 112, second paragraph has been withdrawn.

2. Applicant's arguments, filed 8/17/2009, with respect to the rejection of claims 49, 57-61, 63, and 64 under 35 USC § 112, first paragraph, have been fully considered and are persuasive. The claims have been amended to remove the term "solvates". The rejection of claims 49, 57-61, 63, and 64 has been withdrawn.

3. Applicant's arguments, filed 8/17/2009, with respect to the rejection of claim 58 under 35 USC § 112, first paragraph, have been fully considered and are persuasive. Claim 58 has been amended to remove the terms "a xanthine derivative". The rejection of claim 58 has been withdrawn.

4. Applicant's arguments filed 8/17/2009, regarding the rejection of claims 49, and 57-64 under 35 USC § 103(a) as being unpatentable over D'Amato et. al., US Patent

No. 6,469,045, as evidenced by Wolff, in view of Bilodeau et. al., and further in view of Kovesdi et. al. have been fully considered but they are not persuasive. The Applicant's arguments address the amended claim set, which was submitted on 8/17/2009, and not the earlier claim set, on which the rejection was based upon. Due to the claim amendments, a modified rejection under 35 USC § 103(a) has been made, which will be discussed in detail further in this office action. Accordingly, this action is made FINAL.

5. Claims 49 and 57-64 were examined.

6. Claims 49 and 57-64 are rejected.

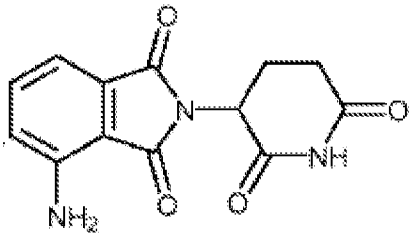
Claim Rejections-35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 49, 61, and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Treston et. al., WO 02/064083 publication. This reference was presented in the Information Disclosure Statement.

9. The claims are drawn to a method of treating macular degeneration, comprising administration of a therapeutically effective amount of 4-(amino)-2-(2,6-dioxo(3-piperidyl))-isoindoline-1,3-dione, which is shown below.



Treston et. al. discloses R- and S- enantiomers of the claimed compound which are effective for treating diseases associated with angiogenesis, especially macular degeneration (Abstract; p. 13, lines 5-14). It is disclosed that the compounds are analogs of thalidomide (p. 13, lines 5-14). Administration of a therapeutically effective amount of the R- and S- enantiomers of the claimed compound is taught (p. 13, line 15-p. 14, line 8; p. 18, lines 10-18), as well as enantiomerically pure compounds (p. 15, lines 1-4). Treston et. al. also discloses that the compounds are effective in treating macular degeneration which is associated with specific conditions such as age-related macular degeneration, Best's disease, and angiogenic damage from diabetic retinopathy, premature retinopathy, and other conditions (p. 2, line 24-p. 4, line 8). Therefore, Treston et. al. anticipates the claims.

Claim Rejections-35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 57-60, 63, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treston et. al., WO 02/064083 publication, as applied to claims 49, 61, and 62 above, in view of D'Amato et. al., US Patent No. 6,469,045, in view of Gillies et. al., WO 00/02564 publication.

As discussed supra, Treston et. al. teaches enantiomerically pure compounds of 4-(amino)-2-(2,6-dioxo(3-piperidyl))-isoindoline-1,3-dione for the treatment of macular degeneration.

However, Treston et. al. does not explicitly teach that the compounds are administered along with a therapeutically effective amount of a second active agent, such as thalidomide. Treston et. al. does not explicitly teach that the drug administration occurs prior, during, or after surgical intervention, such as light or laser therapy, directed at reducing or avoiding a symptom of macular degeneration.

D'Amato et. al. teaches that compounds such as thalidomide and thalidomide analogs or precursors are effective for treating diseases and conditions associated with angiogenesis, such as macular degeneration (Abstract; column 1, lines 18-24; column

1, line 65-column 2, line 22; column 5, lines 26-27). D'Amato et. al. also teaches that retinal neovascularization associated with diseases such as Best's disease, retinal detachment, and angiogenic damage due to diabetic retinopathy, premature retinopathy, and other conditions can be effectively treated by thalidomide and thalidomide analogs or precursors (column 1, line 65-column 2, line 39).

One of ordinary skill in the art would have been motivated, at the time of the invention, to treat macular degeneration with the claimed compound, 4-(amino)-2-(2,6-dioxo(3-piperidyl))-isoindoline-1,3-dione and thalidomide because the prior art teaches that both of these agents are effective for treating macular degeneration. As both agents are taught as being utilized for the same purpose, such as for the treatment of macular degeneration, it would have been prima facie obvious for one of ordinary skill in the art, at the time of the invention, to treat macular degeneration by administration of both agents.

Gillies et. al. teaches a method of treating macular degeneration, comprising administration of a steroidal active agent and an additional anti-angiogenesis agent, such as thalidomide (Abstract; p. 8, claim 1; p. 9, claims 16 and 17; p. 10, claim 18). It is also taught that the drug treatment therapy can occur in conjunction with other therapies, such as laser therapy (p. 10, claims 20 and 21). Gillies et. al. teaches also that the active agents can be administered to the patient either before or after the laser surgery (p. 10, claim 21). It would have been prima facie obvious to one of ordinary skill in the art, at the time of the invention, to administer the claimed active agents, 4-(amino)-2-(2,6-dioxo(3-piperidyl))-isoindoline-1,3-dione and thalidomide, concurrently,

prior to, or after laser therapy treatment for macular degeneration, because Gillies et. al. teaches that active agents can be administered concurrently with laser therapy for treating macular degeneration, and also, that the active agents can be administered either before or after the laser therapy treatment. As 4-(amino)-2-(2,6-dioxo(3-piperidyl))-isoindoline-1,3-dione and thalidomide are taught by the prior art to be effective drug therapies for treating macular degeneration, one of ordinary skill in the art would have expected success in administering these agents to patients undergoing treatment for macular degeneration, and who were also undergoing laser therapy treatment, because Gillies et. al. teaches that active drug agents can be administered concurrently with laser therapy to treat macular degeneration.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information Disclosure Statement

14. The information disclosure statement (IDS) submitted on 8/10/2009 was filed after the mailing date of the non-final action on 4/15/2009. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH PIHONAK whose telephone number is (571)270-7710. The examiner can normally be reached on Monday-Thursday 8:00 AM - 6:30 PM EST, with Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.P.

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